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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/751,052	01/02/2004	Imir Bejko	71607	2167	
7590 05/25/2005			EXAMINER		
Mark L. Davis			ZIMMER, MARC S		
P.O. Box 9293 Gray, TN 37615-9293			ART UNIT	PAPER NUMBER	
• • • • • • • • • • • • • • • • • • • •			1712	<u> </u>	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

				<i>t</i> s l			
	Applica	ation No.	Applicant(s)				
	10/751	,052	BEJKO ET AL.				
Office Action Summary	Examin	ier	Art Unit				
	Marc S.	Zimmer	1712				
The MAILING DATE of this comm Period for Reply	nunication appears on	the cover sheet with	the correspondence add	ress			
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMU - Extensions of time may be available under the provise after SIX (6) MONTHS from the mailing date of this composition of the period for reply specified above is less than thirm of the period for reply is specified above, the maximum of Failure to reply within the set or extended period for Any reply received by the Office later than three mon earned patent term adjustment. See 37 CFR 1.704(b)	JNICATION. ions of 37 CFR 1.136(a). In no ommunication. ty (30) days, a reply within the s m statutory period will apply and eply will, by statute, cause the a ths after the mailing date of this	event, however, may a repl statutory minimum of thirty (d will expire SIX (6) MONTH application to become ABAN	ly be timely filed 30) days will be considered timely. IS from the mailing date of this con NDONED (35 U.S.C. § 133).	nmunication.			
Status							
1) Responsive to communication(s)	filed on 02 January 20	004					
2a)☐ This action is FINAL .							
3) Since this application is in conditi	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•					
4) ⊠ Claim(s) <u>1-20</u> is/are pending in the 4a) Of the above claim(s) is 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-9 and 11-19</u> is/are rejected. 7) ⊠ Claim(s) <u>10 and 20</u> is/are objected. 8) □ Claim(s) are subject to reserve.	s/are withdrawn from o ected. ed to.	;					
Application Papers							
9)☐ The specification is objected to by	the Examiner.						
10) The drawing(s) filed on is/a	are: a) ☐ accepted or	b)☐ objected to by	the Examiner.				
Applicant may not request that any o	bjection to the drawing(s) be held in abeyance	e. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) includes the second state of the seco	-		-	• •			
Priority under 35 U.S.C. § 119		·					
12) Acknowledgment is made of a cla a) All b) Some * c) None of 1. Certified copies of the prior 2. Certified copies of the prior 3. Copies of the certified copi application from the Interna * See the attached detailed Office ac	f: ity documents have be ity documents have be es of the priority docu ational Bureau (PCT R	een received. een received in App ments have been re cule 17.2(a)).	olication No eceived in this National S	itage			
		· ·					
Attachment(s)		1	(DTC 110)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review 	w (PTO-948)	4) Interview Sun Paper No(s)/I	nmary (PTO-413) Mail Date				
Information Disclosure Statement(s) (PTO-1449) Paper No(s)/Mail Date	•		mal Patent Application (PTO-	152)			

Application/Control Number: 10/751,052

Art Unit: 1712

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. None of the subject matter recited herein is expressly supported by the Specification. Further, it cannot be ascertain which type of correlation is being performed in the Examples section.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-6, 12-14, and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of claims 3-6 and 16-17 a "said" polyester resin is recited. However, the method/products recited by claims 1 and 15 feature two polyester resins hence it cannot be ascertained which resin is being referred to by "said" polyester. Correction is required.

As for claims 12-14, it is not clear what ratio is alluded to. The Examiner can conceive of three different meanings: (i) the weight ratio of the first and second

Art Unit: 1712

polyesters, or (ii) the weight ratio of the polyester to hydroxyalkylamide, or both. Clarification is required. Also, it is difficult to ascertain what precisely is meant by the terms "fixed" and varied". By fixed, does Applicant mean that data points are taken for $\Delta_{\text{acid value}}$ vs gloss for different values of $\Delta_{\text{acid value}}$ but where the weight ratio is the same? By extension of this inference, "varied" would apparently indicate that $\Delta_{\text{acid value}}$ vs gloss is plotted for several weight ratios at a given $\Delta_{\text{acid value}}$. Applicant is required to explain better explain the method recited by these claims but should be careful not to introduce new matter in doing so.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alford, U.S. Patent # 6,350,821 in view of Faecke et al., U.S. patent # 6,891,012 or Moens et al., U.S. patent # 6,635,721, or Blatter et al., U.S. patent # 6,261,690, or Kaplan et al., EP 664325.

Alford discloses the preparation (column 1, lines 50-67 through column 2, lines 1-8) of a matte powder coating composition that entails dry blending together two carboxyl-functional polyester resins having different acid values and crosslinker, melt blending the dry blend to form an extrudate, and pulverizing the extrudate to provide an

Application/Control Number: 10/751,052

Art Unit: 1712

intimate mixture of polyester and crosslinking agent in powder form. There is a recognition therein in the paragraph bridging columns 3 and 4 that the low gloss is a result of the significantly different curing rates of a polyester having a low acid number and one having a high acid number. The different curing rates leads to an imperfect coating surface that lowers gloss. Of course, the skilled artisan can infer from this teaching that gloss can be manipulated by selecting two or more polyester resins having a smaller difference in their acid numbers where higher gloss is desired and selecting two or more polyester resins having a larger difference in their acid numbers where lower gloss is desired.

Alford does not, on the other hand, directly teach a step equivalent to step (e) of the claimed method nor does he contemplate using a β -hydroxyalkylamide as the crosslinking agent. As for the first deficiency, it seems evident that some kind of numerical analysis would have had to have been performed to arrive at the conclusion that a lowering in the gloss comes as a result of using polyester resins having a wider discrepancy in their acid values. Indeed, a relationship between gloss and $\Delta_{\text{acid value}}$ would not have been at all apparent had only a single data point been recorded. It is only through the establishment of multiple data points that he could have reasonably hypothesized that the two parameters were somehow correlated. Further, a best fit analysis of the data is obvious so as to be able to predict what difference in acid values would bring about the desired level of gloss.

As for the crosslinking agent, Alford only contemplates using epoxide functional crosslinking agents and, in particular, triglycidyl isocyanurate. However, Faecke et al.,

Art Unit: 1712

(column 1, lines 14-17) Moens et al. (column 8, lines 9-46), Blatter et al. (column 6, lines 20-26), and Kaplan et al. (abstract) all suggest that epoxide-based crosslinking agents and β-hydroxyalkylamide are equivalents. That is, each of the references mention using either of the type disclosed by Alford or the type disclosed by Applicant in concert with a polyester-based powder coating composition without there being any suggestion that one is preferred over the other. Indeed, both types are described as conventional by the prior art. "It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezel* 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532.

As for claims 4, 5, 8-10, 17, and 19, first and second polymers with overlapping acid value ranges and in similar relative quantities are disclosed in column 3, lines 40-54.

As for claim 6, insofar as Alford teaches forming a extrudate, it would be obvious to select resins having lower viscosities to facilitate their mixing.

As for claim 7, the relative amounts of crosslinking agent and polyester are not disclosed in these terms by Alford. Nevertheless, (a) it is widely appreciated that certain properties of a coating composition may be adjusted by optimizing the relative quantities of crosslinking agent and base polymer and, hence, the number of reactive groups contributed by each, and (b) Alford contemplates using the composition disclosed therein for similar applications so this aspect is obvious if not anticipated. "Discovering

Application/Control Number: 10/751,052 Page 6

Art Unit: 1712

an optimum value of a result effective variable involves only routine skill in the art." *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

Claims 10 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Alford does not even suggest that equal amounts of the polyesters having different acid values might be employed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Zimmer